Practitioner's Docket No. 944-003.180

PATENT

10/656888

Preliminary Classification:

Proposed Class:

Subclass:

NOTE: "All applicants are requested to include a prefirmary classification on newly filed patent applications. The prelimitary classification, preferably class and subclass designations, should be identified in the upper right-hand corner of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 128." M.P.E.P. § 601, 7<sup>th</sup> ed.

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop PATENT APPLICATION Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### **NEW APPLICATION TRANSMITTAL**

Transmitted herewith for filing is the patent application of

Inventor(s): Jukka-Pekka VIHMALO, Marko T, AHVENAINEN and Jakke MÄKELÄ

WARNING: 37 C.F.R.§ 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

(1) The inventorship of a nonprovisional application is that inventorship set forth in the cath or declaration as prescribed by § 1.63, except as provided for in § 1.53(a)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(l) is filed supplying or changing the name or names of the inventor or inventor.

For (title):

MEMORY WEAR LEVELING

### CERTIFICATION UNDER 37 C.F.R. § 1.10\*

(Express Mail label number is mandatory) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal service on this date, <u>September 5, 2003</u>, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number <u>EV\$25883786US</u>.

EV\$25883786US

Ann Okrentowich

(type or print name of person mailing paper)

Signature of person mailing paper

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. §. 1.10(l). Since the filing of correspondence under §.1.10 without the Express Mail mailing label

Since us iming or correspondence under § 1.10 without the Express whan making lades thereon is a oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(New Application Transmittal [4-1] page 1 of 11)

# 1. Type of Application This new application is for a(n) (check one applicable item below) (plant WARNING: "Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 37(c)(4), unless the International Application is being filled as a divisional, confinuation or continuation-in-part application. WARNING: Do not use this transmittal for the filling of a provisional application.

NOTE: If one of the following 3 terms apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRICE U.S. APPLICATION CALIMED and a NOTHICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.

Divisional

- ☐ Continuation
- □ Continuation-in-part (C-I-P)

# 2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior field copending nonprovisional applications or copending international applications destinating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S. C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designated the United States of America; or
- (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).
- 37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a perent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENETIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 LSC. §8 120, 120 ro 356c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. § 1540,121 obes not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. § 1549,365(a) or 355(b). 15 rea 2-c} application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider cancelling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Rep. 20, 195, at 20, 205.

WARNING:		G:	When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).
			The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.
3.	Pap	ers	Enclosed
	<u>20</u>	1.1 Pa Pa	quired for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 53 (Design) Application ges of specification ges of salms sees of claims
	WAI	RNIN	(G: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are meessary, they should be made to the original drawing and a high-quality copy of the corrocted original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-mew 37 C.F.R. § 1.04, see Notice of March 9, 1988 (1990 C.6. 57-62).
	NOT	nE:	"deatifying indicia, if provided, should include the application number or the lifts of the invention, inventor-s name, docket number if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm (58 inch) down from the top of the page "37 C.F.R.§ 1.84(g).
			(complete the following, if applicable)
		0	The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. § 1.84(b).
			The enclosed drawing(s) are in color. Three (3) sets of color drawings and a "PETITION TO ACCEPT COLOR DRAWING(S)" are attached. 37 C.F.R. §§ 1.84(a)(2) and 1.84(b).
			formal informal
	В.	Oth	ner Papers Enclosed
	1	_ Pa	ages of declaration and power of attorney ages of abstract her <u>(title page)</u>
4.	Ad	ditio	onal papers enclosed
			nendment to claims
		the	ncel in this application claimsbefore calculating filing fee. (At least one original independent claim must be retained for any purposes.)
		be	d the claims shown on the attached amendment. (Claims added have en numbered consecutively following the highest numbered original ims.)

	Preliminary Amendment					
	☐ Information Disclosure Statement (37 C.F.R. § 1.98)					
	☐ Form PTO-1449 (PTO/SB/08A and 08B)					
	Citations					
	Dec	laration of Biological Deposit				
	ame	mission of "Sequence Listing," computer readable copy and/or endment pertaining thereto for biotechnology invention containing leotide and/or amino acid sequence				
	☐ Authorization of Attorney(s) to Accept and Follow Instructions from Representative					
	Spe	cial Comments				
	Oth	er				
5. De	clars	tion or oath (including power of attorney)				
NOTE:	A newly executed declaration is not required in a continuation or divisional application provided that the prior nonprovisional application contained a declaration as required, the application being filed is by all or fewer than all the inventors named in the prior application, there is no new matter in the application being filed, and a copy of the executed declaration filed in the prior application, chowing the signature or an indication thereon that it was signed is submitted. The copy must be accompanied by a statement requesting deletion of the names of person(s) who are not inventors of the application being filed. If the declaration in the prior application was filed under § 1.47, then a copy of that declaration must be filed accompanied by a copy of the decision granting § 1.47 status what or, if a nonsigning person under § 1.47 has unsaquently joined in a prior application, then a copy of the subsequently executed declaration must be filed. See 37 C.F.R. § 1.63 (a)(11)(3).					
NOTE:	whice give resid	A declaration field to complete an application must be executed, identify the specification to which it is directed, identify each inventor by full name including family name and at least one given name, without abbreviation together with any other given name or initial, and the residence, post office address and country or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 C.F.R. § 1.3(a)(1)-(4).				
NOTE:	The inventorship of a nonprovisional application is that inventorship set forth in the calls or declaration as prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not flied during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed prusuant to § 1.53(d), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or charging the name or names of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).					
		Enclosed				
		Executed by .				
		(check all applicable boxes)				
		inventor(s).				
		legal representative of inventor(s). 37 C.F.R. §§ 1.42 or 1.43.				
		joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached. $\cdot$				
		□ This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F. R. § 1.47 is also attached. See item 13 below for fee.				
	X	Not Enclosed				

5.

NOT	E:	com Appl may	re the filing is a completion in the U.S. of an International Application or where the oletion of the U.S. application contains subject matter in addition to the International lication, the application may be treated as a continuation or continuation-in-part, as the case be, utilizing ADDED PAGE FOR NEW APPLICATION TRANSMITTAL WHERE BENERT PRIOR U.S. APPLICATION CLAIMED.				
			<ul> <li>Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of all the above named inventor(s).</li> </ul>				
(7	he	deci	faration or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).				
			□ Showing that the filing is authorized.  (not required unless called into question. 37 C.F.R. § 1.41(d))				
6.	Inv	ento	orship Statement				
WARNING:		G:	If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.				
The	inv	ento	rship for all the claims in this application is:				
	X	The	e same.				
			or				
	0		the same. An explanation, including the ownership of the various claims the time the last claimed invention was made,				
			is submitted.				
			will be submitted				
7.	Laı	ngua	age				
NOTE:		An application including a signed oath or declaration may be filed in a language other than English. An English translation of the non-English language application and the processing fee of \$130.00 required by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as may be set by the Office. 37 C.F.R. § 1.52(d).					
		⊠	English Non English				
			☐ The attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).				
8.	As	sign	ment				
		X	An assignment of the invention to Nokia Corporation				
			□ is attached. A separate □ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or □ FORM PTO 1595 is also attached.				
			🗵 will follow.				
NOT	E:		an assignment is submitted with a new application, send two separate letters-one for the ilication and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).				

WARNING:	A newly ex continuation 62-64.	ecuted "CE n-in-part app	RTIFICATE UNication is filed	IDER 37 by an assi	C.F.R. § 3.7; ignee. Notice	3(b)" must be filed who of April 30, 1993, 1150	en a ) OG
			on ☐ divisional application and the assignment document on 0 / was filed on				
				•	Reel_		
					Frame	·	
9. Certifi	ied Copy ed copy(ies	) of applic	ation(s)				
Count	ry		Ap	oln. No.		1	Filed
Count	ry		Ар	pln. No.			Filed
from which	n priority is	claimed:					
	is (are) a will follow						
NOTE: The part of	is item is for rent U.S. app der 35 U.S.C. m 18 on the := PRIOR U.S.	any foreign blication or li § 120 is its ADDED PAC APPLICATIO	ntemational Apair entitled to po GES FOR NEW DN(S) CLAIMED	plication f ionity from APPLICA	rom which the	filed directly relates. Its application claims be n application, then com	enefit plete
		-	CLAIMS A	S FILE	)		
Number fi	led		Number Ex	tra	Rate	Basic Fe 37 C.F.R. § 1.16( \$750.00	(a)
Total Clair (37 C.F.R	ns . § 1.16(c))	35 -20 =	15	×	\$18.00 =	270.00	
	ent Claims . § 1.16(b))	4-3 =	1	x	\$84.00 =	84.00	
	ependent c C.F.R. § 1			+	\$290.00		
	Amendm Fee for e	ent deletir extra claim	ling extra cla ig multiple-d is is not being	epender g paid at	ncies is enc this time.	losed.	ad hy
an	nendment, pr	ior to the ex		time per	nod set for n	esponse by the Patent	

ъ.		(\$340.00 – 37 C		
			Filing Fee Calculation	\$
C	. 🗆	Plant application		
		(\$520.00 - 37 C	F.R. § 1.16(g))	
			Filing Fee Calculation	\$
11. Small	Enti	ty Statement(s)		
		ent(s) that this is (are) attached.	a filing by a small enti	ly under 37 C.F.R. §§ 1.9 and
WARNING:	white pates white white has divised 1.55 entile app in the total des	ch the status is available the threat does not affect a character of the threat of threat of the threat of threat of the threat of threat of the threat of threat of the threat of threa	able and desired. Status a my other application or pal rectly dependent upon the ap The refiling of an applicat in-part (including a continu reissue application requires y status for the continuing or left under 35 U.S.C. § 11 application may rely on a ste visional application or the re- for application or in the pate or in the patent and status	shed in each application or patent in a s a small entity in one application or ent, including applications or patents polication or patent in which the status on under § 1.53 as a continuation, eld prosecution application under § a new determination as to continued a new determination as to continued (bg), 120, 121 or 365(o) of a prior tement filed in the prior application or issue application includes a reference ort or includes a copy of the statement as a small entity is still proper and ory filing fee will be treated as such a 26(a)(2).
WARNING:	"Sm stat e <b>d</b> .,	. rev. 2, July 1996 (en	nphasis added).	he person or persons signing the
	_	•	nplete the following, if a	• • •
		Status as a sma	all entity was claimed in	
		benefit is being	, filed on claimed for this applica	, from which tion under:
		35 U.S.C. §	□ 120, □ 121, □ 365(c),	s still proper and desired.
		☐ A copy	of the statement in the	prior application is included.
		Filing F	ee Calculation (50% of	A, B, or C above)
			\$	
NOTE:	are file	ed within 2 months o	aid will be refunded if a smal f the date of timely payment 36. 37 C.F.R. § 1.28(a).	entity statement and a refund request of a full fee. The two-month period is
12. Requ	est fo	or International-	Type Search (37 C.F.F	R. § 1.104(d))
		(	complete, if applicable)	
			mational-type search re mination on the merits t	eport for this application at the akes place.

13. Fee Payment Being Made at This Time					
X	Not Enclosed				
	X	No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. § 1.16(e) ca subsequently.)	n be paid		
	En	closed			
		Filing fee	\$		
		Recording assignment (\$40.00 - 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION.")	\$		
		Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached.  (\$130.00 – 37 C.F.R. §§ 1.47 and 1.17(i))	\$		
	0	For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$		
		Processing and retention fee (\$130.00, 37 C.F.R. §§ 1.52(d) and 1.21(l))	\$		
		Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))	\$		
NOTE:	: 37 C.F.R. § 1.21(l) establishes a fee for processing and retaining any application that is abendoned for failing to complete the application pursuant to 37 C.F.R. § 1.53(l) and this, as well as the changes to 37 C.F.R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the benefit of a prior U.S. application, either the basic filing fee must be paid, or the processing and retention fee of § 1.21(l) must be paid, within 1 year from the notification under § 53(l).				
	То	tal fees enclosed	\$		
14. Mc	etho	d of Payment of Fees			
	Att	tached is a □ check □ money order in the amount of \$			
	Authorization if hereby made to charge the amount of \$				
		to Deposit Account No.			
		to credit card as shown on the attached credit card info authorization form PTO-2038	ormation		
in	☐ Charge any additional fees required by this paper or credit any overpaymer in the manner authorized above. A duplicate of this transmittal is attached.				
NOTE:	Fees should be itemized in such a manner that it is clear for which purpose the fees are paid. 37 C.F.R. § 1.22(b).				

# 15. Auth rizati n to Charge Additi nal F es

WARNING	G:	If no fees are to be paid on filing, the following items should <u>not</u> be completed.				
WARNING	G:	Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.				
		The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No				
		□ 37 C.F.R. § 1.16(a), (f), or (g) (filing fees) □ 37 C.F.R. § 1.16(b), (c), and (d) (presentation of extra claims)				
NOTE:	pres the 1.16	suse additional fees for excess or multiple dependent claims not paid on filing or on later entation must only be paid or these claims canceled by amendment prior to the expiration of time period set for response by the P.T.C. in any notice of fee deficiency (37 C.F.R. § (d)), it might be best not to authorize the P.T.C. to charge additional claim fees, except laby when dealing with amendments after final action.				
		<ul> <li>37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)</li> </ul>				
		□ 37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a))				
		☐ 37 C.F.R. § 1.17 (application processing fees)				
WARNIN	G:	". A written request may be submitted in an application that is an authorization to treat any concurrent or future rapp, requiring a patition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, sees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent or future requiring a petition for an extension of time in any concurrent reply requiring a feet of the submission. Submission of time in any concurrent reply requiring a feet of the submission of time and the submission. "37 C.F.R.§ 1.136(a)(3).				
		□ 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))				
NOTE:	mai	are an authorization to charge the issue fee to a deposit account has been filed before the ling of a Notice of Allowance, the issue fee will be automatically charged to the deposit ount at the time of mailing the Notice of Allowance, 37 C.F.R. §. 1.3110.				

NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filled in the application . . . prior to paying, or at the time of paying, . . issue fee. \*From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

# 16. Instructions as to Overpayment

NOTE:	a reasonable time, nor will the payer be no	not be returned unless specifically requested withi tified of such amounts; amounts over twenty-fiv ested, by credit to a deposit account." 37 C.F.R.
	□ Credit Account No	<del></del>
	□ Refund	
Date:_ Reg. N	g/5/03 No. 54,106	A Trenkel SIGNATURE OF PRACTITIONER
Tel. N	o. <b>(203) 261-1234</b>	Anatoly Frenkel (type or print name of practitioner
		Ware, Fressola, Van Der Sluys & Adolphson, LLP P.O. (Correspondence) Address
Custo	mer No. <b>004955</b>	Building Five, Bradford Green 755 Main Street, P.O. Box 224 Monroe, CT 06468

	Inc	orporation by reference f added pages			
	(check the following item if the application in this transmittal claims the bene prior U.S. application(s) (including an international application entering the stage as a continuation, divisional or C-I-P application) and complete and at the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WH BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.)				
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed  Number of pages added			
	_	· · · · · · · · · · · · · · · · · · ·			
		Plus Added Pages for Papers Referred to in Item 4 Above			
		Number of pages added			
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.			
		Number of pages added			
		Plus "Assignment Cover Letter Accompanying New Application"			
		Number of pages added			
X	Sta	stement Where No Further Pages Added			
		(if no further pages form a part of this Transmittal, then end this Transmitta with this page and check the following item.			
		This transmittel ands with this page			

## IN THE UNITED STATES PATENT AND TRADEMARK FFICE

in re application of: Vihmalo et al.

Serial No.: 0 /to be assigned Group No.: Filed: herewith Examples:

Filed: herewith Examiner:
For: MEMORY WEAR LEVELING

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

13-1450 Mail Stop Pat App EXPRESS MAIL CERTIFICATE

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EV252883766US

"Express Mall" label number \_

Date of Deposit 9/5/03

I hereby state that the following attached paper or fee

New Appl. Transmittal Specification - 20 pgs + cover Claims - 7 pgs.

Abstract - 1 pg. Dwgs. 8 sheets

Self addressed stamped post card

Is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10, on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, BCX-20231, Alexandria, VA 22313-1450.

Ann Okrentowich

Typed or printed name of person mailing paper or fee

Man Opentowich
Signature of person mailing paper or fee

NOTE: The label number need not be placed on each page. It should, however, be placed on the first page of each separate document, such as, a new application, amendment, assignment, and transmittal letter for a fee, along with the certificate of mailing by "Express Mail." Although the label number may be on checks, such a practice is not required. In order not to deface formal drawings it is suggested that the label number be placed on the back of each formal drawing or the drawings be accompanied by a set of informal drawings on which the label number is placed.

(Express Mail Certificate [8-3])